

**STUDY OF SOIL ERODIBILITY VALUE IN GERBOSARI VILLAGE,
SAMIGALUH DISTRICT, KULON PROGO**

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ABSTACT

Gerbosari Village, Samigaluh District is in the north of the Kulon Progo Regency area at an altitude of 500 to 975 meters above sea level. Based on 2021 BPBD data, Gerbosari Village is an area prone to medium-high erosion in Kulon Progo Regency. This district is on a flat to very steep slope with a soil type, namely Inceptisol. This area has an important role as an area that supports the function of agricultural and non-agricultural cultivation areas in Kulonprogo Regency. This research aims to determine the value of soil erodibility in several land uses with different slopes. The method used is a survey by determining sample points using purposive sampling and laboratory analysis by determining erodibility values using the formula according to Wischmeier and Smith (1978). Determination of sample locations is based on the overlay of land use maps and slope maps. Soil samples are taken at a depth of 0-20 cm on disturbed soil and a ring sampler on undisturbed soil. The parameters used include soil texture, soil structure, organic matter and soil permeability. The results of the research show that erodibility in the land of Gerbosari District is at a moderate to quite high level with the highest erodibility value found in the moorland land use type with a gentle slope, namely 0.54 and the lowest erodibility value found in the plantation use type with a rather steep slope of 0,28. The factor that influences soil erodibility at the research is soil texture (percentage of dust and very fine sand).

Keywords: Erodibility, Land Use, Organic matter, Slope, Soil texture, Soil structure, soil permeability